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EXAMINER
VAN DOREN, BETH

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 12/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/427,149	WARD, RICHARD E.	
	Examiner	Art Unit	
	Beth Van Doren	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 September 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-70* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-70* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The following is a non-final office action in response to communications received on September 3, 2002. Claims 1, 2, 11, 14, 16, 23, 24, 26, 30, 32, 42, 51, 54, 63, and 64 have been amended. Claims 66-70 have been added. Claims 1-70 are pending in this application.

Response to Amendment

2. Applicant's amendment of claim 32 is sufficient to overcome the claim objection set forth in the previous office action.

3. Applicant's amendment to claims 1, 11, 24, 30, 41, 51, and 64 are sufficient to overcome the 35 USC § 112, second paragraph, rejections set forth in the previous office action.

4. Examiner withdraws the 35 USC § 112, second paragraph, rejection of claim 26 set forth in the previous office action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 11-13, 15, 21-39, 41-48, 51-53, 55, and 61-68 are rejected under 35 U.S.C. 102(b) as being anticipated by Macrae et al. (U.S. 5,826,237).

6. As per claim 1, Macrae et al. teaches a method for automatically generating a service plan and associated work flow for a customer using a computer based network comprising the steps of:

Creating a plurality of structured sentences for each of a plurality of identified customer needs in an electronic storage area, said plurality of structured sentences including structured sentences for services, each structured sentence for service identifying a needed service corresponding to one of the identified customer needs (See Figure 12. See also column 7, lines 34-35, column 9, lines 55-70, and column 10, lines 1-10. Macrae et al. discloses a library containing hierarchical folders. For example, if the service of strep throat culture is needed by a customer, the Labs category would be opened, which contains different types of labs and their different services); and

Creating an electronic workflow adapted to assist completion of each needed service (See column 7, lines 16-19 and 56-62, in which Macrae et al. teaches the steps of defining a treatment work flow and creating an electronic template using this work flow).

7. As per claim 2, Macrae et al. further discloses a method wherein said step of creating the electronic workflow creates a workflow process instance for each needed service, such that there exists a workflow process instance associated with each structured sentence for service (See column 7, lines 29-37, in which Macrae et al. further discusses the above mentioned service folders in context with the order nodes that make up the electronic template. Each instance in the work flow process is represented by an order node and each order node represents a needed service which derives its attributes from the categorized folders described above).

8. As per claim 3, Macrae et al. further discloses a method wherein said plurality of structured sentences have a subject and a plurality of attributes contained therein (See column 7, lines 33-37).

9. As per claim 4, Macrae et al. further discloses a method wherein certain of the attributes associated with the structured sentences for services contain a selected attribute value chosen from among a group of possible attribute values (See column 10, lines 6-9, wherein Macrae et al. disclose the selected strep test, an attribute of a lab test, costing $40).

10. As per claim 5, Macrae et al. further discloses a method wherein certain ones of said workflow process instances have at least one decision step, task firing condition, or routing rules that creates a plurality of possible sequences of tasks that are invoked as part of the execution of said workflow process instances (See, for example, Figure 2 in which Macrae et al. disclose a simplified template for work flow dealing with step throat. The result of the step test directs the continuation of the workflow along a predetermined branch, which will encounter another order node with similar capabilities. See column 13, lines 26-30, in which Macrae et al. discloses flow control nodes, which are coupled with order nodes and contain a set of routing rules).

11. As per claim 6, Macrae et al. discloses a method further including the step of modifying at least one of the structured sentence attributes, which modification also causes a change to the sequence of tasks invoked within at least one of the workflow instances (See column 7, lines 55-67, column 8, lines 1-3, and column 11, lines 15-33, and column 22, lines 50-67, wherein an attribute value is changed regarding the structured sentence to clarify based on the merging of more structured sentences to the plan).

12. As per claim 7, Macrae et al. further discloses a method wherein selecting a different one of the possible attributes from among the group of possible attributes will result in the selection of a different one of the plurality of possible routes with respect to an associated decision step, task firing condition or routing rule (See column 32, lines 39-44, which explains the rule object node interfaces that governs the workflow. The decision made about the selection of an attribute contained in an order node determines the route followed in the workflow path).

13. As per claim 8, Macrae et al. teaches a method further including the step of electronically inputting answers to questions, and wherein the electronically input answers to questions also causes a change to the sequence of tasks invoked within the at least one of the workflow process instances (See figures 2 and 6, and column 2, lines 38-43, column 7, lines 43-50, and column 8, lines 5-22, which disclose inputting the answer to the question "strep?" based on the lab results, this result changing the sequence of tasks invoked in the workflow instances).

14. As per claim 11, Macrae et al. further discloses a method wherein certain ones of said workflow process instances have at least one decision step, task firing condition, or routing rule that creates a plurality of possible routes contained therein, and further including the step of creating or modifying at least one of the workflow relevant data items, which modification also causes a change to the sequence of tasks invoked within at least one of the workflow process instances (See column 21, lines 8-12 and 18-21, wherein Macrae et al. disclose modifying the process instance by adding a node, deleting a node, or modifying the contents of an existing node. Since these nodes dictate the flow of the predefined service plan, their modification will cause changes in said flow).

15. As per claim 12, Macrae et al. further discloses a method wherein certain ones of said plurality of workflow process instances have workflow relevant data contained therein (See column 7, lines 29-36, wherein Macrae et al. discuss the order items contained in the process instance of order nodes. Order item data may include attributes such as category, name, description, cost, etc.).

16. As per claim 13, Macrae et al. teaches a method further including the step of electronically inputting answers to questions, and wherein the electronically input answers to questions are used to create or modify workflow relevant data for certain ones of the workflow process instances (See figures 2 and 6, and column 2, lines 38-43, column 7, lines 43-50, and column 8, lines 5-22, which disclose inputting the answer to the question "strep?" based on the lab results. The lab results are entered into the tool, this creating workflow relevant data for certain ones of the workflow process instances).

17. As per claim 15, Macrae et al. further discloses a method wherein the plan is a care plan, the customer is a patient, and the plurality of identified customer needs are health related problems to be addressed as part of the patient's care (See column 7, lines 16-19, and column 8, lines 4-22. Macrae et al. discloses a workflow care plan in the form of a medical treatment template and provides a specific Clinical Template example, teaching a simple workflow for treating a patient with a sore throat. The items in the order nodes are defined by hierarchical folders of health related categories, as discussed in the prosecution of claim 1).

18. As per claim 21, Macrae et al. discloses a method further including the step of creating other structured sentences, said other structured sentences including structured sentences for a goal, a fact, a protocol, and a finding (See column 8, lines 23-29, wherein Macrae et al. provides

for the creation of other structured sentences that have an objective, information, a set of rules, and a result. See column13, lines 29-31, which discuss the rules contained in the flow control nodes that dictate the workflow).

19. As per claim 22, Macrae et al. discloses a method further including the step of initiating the workflow (See column 17, lines 27-29, which discusses assigning a workflow template to a specific patient and executing said workflow).

20. As per claim 23, Macrae et al. further discloses a method including updating status information for the service plan as workflow progresses (See column 22, lines 28-44, in which Macrae et al. discusses the situation where another service plan must be invoked for a patient while another is already running, such as the situation of a pregnant woman, who is utilizing the pregnancy template, getting a sore throat midterm and needing other services. In a case such as this, secondary templates may be called and merged with the current template).

21. As per claim 24, Macrae et al. further discloses a method wherein updates are provided to a user of the service plan in one form and updates are provided to the customer in another form (See Figures 14 and 15 and column 10, lines 37-51, wherein Macrae et al. teaches displaying updates to the user of the tool (such as a doctor), which is a summarized list of the status of the orders of the workflow. See also figure 41 and column 21, lines 44-67 and column 22, lines 1-21, which disclose translating the information of the workflow into a more readable sheet and exporting this information to an outside application).

22. As per claim 25, Macrae et al. further discloses a method wherein the one form is directed to a clinician and the other form is directed to a nonmedical person (See column 22, lines 45-50, and column 25, lines 47-51, which explains the user interacting with the workflow

updates during the merge process. In the merge example disclosed by Macrae et al. in column 22, lines 56-67, the user receiving the merge updates is Mr. Sander's doctor).

23. As per claim 26, Macrae et al. discloses a method of automatically updating a predetermined plurality of existing service plans corresponding to a respective plurality of customers, each of said service plans including a plurality of structured sentences for each of a plurality of identified customer needs stored in an electronic storage area, said plurality of structured sentences including structured sentences for services, each structured sentence for service identifying a needed service corresponding to one of the identified customer needs and an electronic workflow capable of assisting completion of each needed service (See column 7, lines 15-19, 29-37, and 56-67, and column 8, lines 1-3), the method comprising the steps of:

generating a report based upon data contained within each of the predetermined plurality of existing service plans or from data obtained from performing workflow associated with each of the predetermined plurality of existing service plans (See Figures 14 and 15 and column 10, lines 37-51, wherein Macrae et al. teaches displaying a summary of the result node content listing the status of the orders of the workflow. Further details of the specifics of each order item can also be displayed. See also Figure 13, which is another report of the workflow, summarizing the work orders contained in the service plan);

selecting a plurality of customers in need of one or more services (See column 17, lines 23-25, wherein Macrae et al. discloses assigning a care plan template to a patient or multiple patients in need of said template);

adding new structured sentences that are common to the predetermined plurality of existing service plans for the selected plurality of customers (See column 7, lines 54-67, and

column 8, lines 1-3, in which Macrae et al. discloses creating and saving brand new care plans as well as retrieving existing care plans from a template library. The retrieved care plan can be modified and saved to the template library. See column 21, lines 8-11, which discusses adding new order structured nodes to a generic care plan to create a new, specific care plan).

Causing initiation of the revised workflow instances for each revised service plan (See column 17, lines 24-29, in which Macrae et al. discloses tailored workflows being assigned to patients and executed).

24. As per claim 27, Macrae et al. further discloses a method wherein said plurality of structured sentences have a subject and a plurality of attributes contained therein and wherein the step of adding new structured sentences includes the step of determining certain of said plurality of attributes for said new structured sentences based upon a characteristic that is common to each of said respective plurality of customers (See column 8, lines 23-29, in which Macrae et al. teaches using a generic treatment template to create a clinic template that can be used to treat all patients that are experiencing a sore throat).

25. As per claim 28, Macrae et al. further discloses a method wherein said plurality of structured sentences have a subject and a plurality of attributes contained therein and wherein the step of adding new structured sentences includes the step of individually determining other ones of said plurality of attributes for said new structured sentences based upon another characteristic that is not common for each of said respective plurality of customers (See column 21, lines 8-11, in which Macrae et al. discusses further customizing templates based on differing needs of customers).

26. As per claim 29, Macrae et al. further discloses a method wherein the step of adding new structured sentences further includes the step of modifying certain existing structured sentences that are common to the predetermined plurality of existing service plans based upon the data (See column 19, lines 29-40, which discusses manually executing a plan so that the flow proceeds down a branch of the plan regardless of the determined data and forcing it to consider the other data's route); and

wherein the step of adding workflow instances includes the step of revising workflow instances associated with the modified certain existing structured sentences (See column 22, lines 59-67, which explains the idea of a merge. Merging order structured nodes into the plan can be occur at any point during the original plan's execution).

27. As per claim 30, Macrae et al. discloses a method for creating a service plan and an associated workflow for a customer using a computer based network comprising the steps of:

providing electronically:

a plurality of structured sentence data items for each of a plurality of possible customer needs in an electronic storage area, said plurality of structured sentence data items including structured sentence data items for services, each structured sentence item for service identifying a needed service corresponding to one of the possible customer needs (See Figure 12. See also column 7, lines 34-35, column 9, lines 55-70, and column 10, lines 1-10. Macrae et al. discloses a library containing hierarchical folders. For example, if the service of strep throat culture is needed by a customer, the Labs category would be opened, which contains different types of labs and their different services);

an electronic workflow capable of assisting completion of each needed service (See column 7, lines 20-62, in which Macrae et al. teaches in depth the building of an electronic workflow);

and at least first and second templates, each of said at least first and second templates comprising a different set of certain ones of said plurality of structured sentence data items that each relate to different possible customer needs (See column 7, lines 62-67, and column 8, lines 1-3, in which Macrae et al. discusses retrieving a existing template from a template library, building a new template and saving it to said library, or retrieving and modifying an existing template similar to the current situation. The template library, therefore, contains multiple prewritten workflows);

selecting at least a first template that relates to an identified customer need (See column 7, lines 63-67, and column 8, lines 1-3, which discuss selecting a template that coincides with a treatment needed for a patient); and

selecting those structured sentence data items within the first template that relate to the specific need of a particular customer, the step of selecting those structured sentence data items also causing the selection of workflow instances adapted to assist completion of each needed service (See again column 7, lines 63-67, and column 8, lines 1-3, in which Macrae et al. discuss selecting the parts of a similar, existing template and modifying the template to suit the current need. When selecting the nodes in the workflow that are applicable to the situation, the user is also selecting the structure sentence data items contained therein).

28. As per claim 31, Macrae et al. further discloses a method wherein said plurality of structured sentence data items have a subject and plurality of attributes contained therein and

wherein the step of selecting those structured sentence data items includes the step of determining the values for a plurality of said attributes for corresponding structured sentences in a service plan for a customer (See column 7, lines 33-37, which describe the subject and attributes contained in the structured order nodes of the workflow. A determination concerning the value of an attribute contained in a structured order node is made, for example see column 8, lines 11-22, wherein the attribute strep test is determined to have a positive or negative value, and the route taken in the plan is based on these values).

29. As per claim 32, Macrae et al. further discloses a method wherein the attribute values for certain ones of said plurality of attributes is selectable from a collection of mutually exclusive choices (See again column 8, lines 11-22, wherein the value of the attribute strep test can only come back positive or negative).

30. As per claim 33, Macrae et al. further discloses a method wherein the attribute for certain ones of said plurality of attribute is a date (See column 14, lines 51-54, in which Macrae et al. discusses the implementation of ongoing order structured nodes. See column 14, lines 63-67, and column 15, line 1, wherein Macrae et al. discloses that the ongoing order has attributes such as start date or repetition date).

31. As per claim 34, Macrae et al. further discloses a method wherein the attribute for certain ones of said plurality of attributes is a dosage (See column 14, lines 51-54, in which Macrae et al. discusses the implementation of ongoing order structured nodes. See column 15, lines 9-15, in which Macrae et al. discloses that the ongoing order indicates medication to be given with a care plan at a specified speed and dosage).

32. As per claim 35, Macrae et al. further discloses a method wherein the service plan is a care plan, the customer is a patient, the plurality of possible customer needs are health related problems, and the identified customer needs are those health related problems of the customer (See column 7, lines 16-19, and column 8, lines 4-22. Macrae et al. discloses a workflow care plan in the form of a medical treatment template and provides a specific Clinical Template example, teaching a simple workflow for treating a patient with a sore throat. The items in the order nodes are defined by hierarchical folders of health related categories).

33. As per claim 36, Macrae et al. discloses a method further including the step of initiating the workflow, the step of initiating the workflow being caused by a user verifying the accuracy of the service plan (See column 17, lines 24-29, wherein Macrae et al. discusses assigning a template to a patient and executing said template. At the time of assignment, the plan of the template may have already been tailored to meet the needs of the patient, or modification can occur before or during execution).

34. As per claim 37, Macrae et al. further discloses a method wherein during the step of providing a plurality of structured sentence data items is accomplished by a generic metadata supplier that transmits the data to a service provider user, and the service provider user performs the steps of selecting (See column 7, lines 34-35 and 63-67, and column 8, lines 1-3 and 24-29, wherein Macrae et al. discusses libraries containing generic order node component items and generic templates, which are accessed by the user and modified to meet the specific needs of said user and his/her patient).

35. As per claim 38, Macrae et al. discloses a method further including the step of the service provider adding structured sentences to the service plan (See column 21, lines 8-12, in which

Macrae et al. discloses a user modifying a generic service plan template by adding order structured nodes that contain attributes to the user's treatment needs).

36. As per claim 39, Macrae et al. discloses a method further including the step of the service provider modifying certain ones of the selected structured sentences from the service plan (See column 21, lines 8-12, in which Macrae et al. discloses a user modifying a generic service plan template by adding, deleting, or modifying order structured nodes that contain attributes to the user's treatment needs).

37. As per claims 41-48, 51-53, 55, and 61-65, claims 41-48, 51-53, 55, and 61-65 are apparatus versions of claims 1-8, 11-13, 15, and 21-25, respectively. Since the specification provides nothing more than a software device running in a network computing environment utilizing standard computers, claims 41-48, 51-53, 55, and 61-65 are rejected on the same grounds as the methods of claims 1-8, 11-13, 15, and 21-25, respectively.

38. As per claim 66, Macrae et al. teaches a method wherein the step of updating the status information for the service plan includes modifying an attribute contained in one of the structured sentences (See column 11, lines 15-33, and column 22, lines 50-67, wherein an attribute value is changed regarding the structured sentence to clarify based on the merging of more structured sentences to the plan).

39. As per claim 67, Macrae et al. discloses a method wherein the step of updating the status information for the service plan includes adding another structured sentence relating to services (See column 22, lines 28-44, in which Macrae et al. discusses the situation where another service plan must be invoked for a patient while another is already running, such as the situation of a pregnant woman, who is utilizing the pregnancy template, getting a sore throat midterm and

needing other services. In a case such as this, other structured sentences relating to services are added to the service plan).

40. As per claim 68, Macrae et al. teaches a method wherein the plurality of structured sentences in at least one of said first and second templates include a group of structured sentences that are associated with a particular customer need (See column 7, lines 56-67, and column 8, lines 1-3, wherein the templates in the library include structured sentences and wherein these structured sentences represent needs of the patient. See figure 6 and column 8, lines 5-22).

Claim Rejections - 35 USC § 103

41. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

42. Claims 9-10, 17-20, 40, 49-50, and 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macrae et al. (U.S. 5,826,237) in view of Brown (U.S. 6,161,095).

43. Claims 14, 16, 54, 56, 69, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macrae et al. (U.S. 5,826,237).

44. As per claims 9 and 10, teaches a method further including the step of electronically inputting answers to questions, and wherein the electronically input answers to questions also causes a change to the sequence of tasks invoked within the at least one of the workflow process instances (See figures 2 and 6, and column 2, lines 38-43, column 7, lines 43-50, and column 8,

lines 5-22, which disclose inputting the answer to the question "strep?" based on the lab results, this result changing the sequence of tasks invoked in the workflow instances). However, Macrae et al. does not expressly disclose that the answers to the question of the workflow process are, as per claim 9, entered by the customer or, as per claim 10, remotely input by the customer and transmitted via the internet.

Brown discloses:

i. As per claim 9, the answers to questions being input by the customer (See figures 2, 3, 6, and 9, and column 3, lines 35-42 and 59-67, wherein the patient enters information into the interface of the computer and this data is sent to the computer of the doctor/clinic).

ii. As per claim 10, the answers to questions being remotely input by the customer and transmitted via the internet (See figures 2, 3, 6, and 9, and column 3, lines 35-42 and 59-67, and column 10, lines 47-50, wherein the patient enters information into the interface of the computer and this data is sent to the computer of the doctor/clinic via a communications network).

Both Macrae et al. and Brown disclose computer implemented patient care tools wherein data entered about the patient causes the workflow/medical plan to enact the appropriate workflow/medical plan instances. Furthermore, Macrae et al. discloses using its tool to medicate a patient during a treatment plan (See column 14, lines 51-67, and column 15, lines 1-5 and 19-22). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have the customer (patient) input answers to questions into the tool of the clinic/doctor, both locally and remotely, in order to increase the accuracy of the tool by allowing

it to extract the exact data it needs as well as increase the user friendliness of the tool by allowing the patient to have access to medical information at a remote location.

45. As per claim 17, Macrae et al. disloses a method that creates an electronic workflow, said workflow containing order nodes with actions to be performed and the ability to see the status of the action (See column 7, lines 20-37, and column 10, lines 35-60). However, Macrae et al does not expressly disclose creating alerts to signify that an action needs to be taken.

Brown et al. does disclose a method wherein the step of creating the electronic workflow includes creating an alert that will signify that an action needs to be taken (See column 4, lines 43-51, wherein Brown discusses a service provider creating a treatment regimen and a protocol to be followed be a patient device, said regimen and protocol being sent via a network to a server device and then to a patient device. See column 5, lines 3-14, in which Brown discusses performing an act based an alert message issued as a reminder to a patient. The actions to be performed are dictated by a treatment regimen determined at another device and transferred, via a network, to the patient's device).

Both Macrae et al. and Brown disclose computer implemented patient care tools wherein data entered about the patient causes the workflow/medical plan to enact the appropriate workflow/medical plan instances. Furthermore, Macrae et al. discloses using its tool to medicate a patient during a treatment plan (See column 14, lines 51-67, and column 15, lines 1-5 and 19-22). It would have been obvious to a person of ordinary skill in the art at the time of the invention to equip the electronic workflow of Macrae et al. with the means to alert when an action needs to be taken in order to reduce errors and the amount of time consumed by the

medical plan by providing signals to alert a user that a specified action needs to be taken, as dictated by the template/workflow.

46. As per claims 18, 19, and 20, Macrae et al. discloses a method of generating a service plan further including the step of automatically generating a translation of the service plan and exporting the patient plan data to other applications (See Figures 14 and 15 and column 10, lines 37-51, wherein Macrae et al. teaches displaying the result node content, which is a summarized list of the status of the orders of the workflow. See also figure 41 and column 21, lines 44-67 and column 22, lines 1-27, which disclose translating the information of the workflow into a more readable sheet and exporting this information to an outside application). However, Macrae et al. does not expressly disclose, as per claim 18, transmitting the translation of the service plan to the customer or, as per claim 19, revising the translation prior to the transmitting, or, as per claim 20, transmitting the translation to a remote computer.

Brown discloses a method further including the steps of:

i. As per claim 18, transmitting a translation of the service plan to the customer (See figures 2, 3, and 9, and column 4, lines 43-51, wherein the treatment regimen is transmitted from the doctor to the patient via the network).

ii. As per claim 19, revising a translation prior to the transmitting (See column 5, lines 61-67, which discusses editing the treatment plan at the service device and then transmitting the new plan to the patient device).

iii. As per claim 20, transmitting to a remote customer computer (See figures 2, 3, and 9, and column 3, lines 35-42 and 59-67, column 5, lines 1-3, column 6, lines 29-43, and

column 10, lines 47-50, wherein the data is sent to the computer of the customer via a communications network).

Both Macrae et al. and Brown disclose computer implemented patient care tools wherein data entered about the patient causes the workflow/medical plan to enact the appropriate workflow/medical plan instances. Furthermore, Macrae et al. discloses using its tool to medicate a patient during a treatment plan (See column 14, lines 51-67, and column 15, lines 1-5 and 19-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit the translated workflow information to the customer (patient), both locally and remotely, in order to increase the customer friendliness and the flexibility of the tool by allowing the patient to have access to their medical information in an comprehendible and understandable format at both local and remote locations.

47. As per claim 40, Macrae et al. discloses a method of automatically generating the data needed to inform the process of updating structured sentence data items and associated workflow process specifications that are usable for the creation and execution of a service plan, said plurality of structured sentence data items including structured sentence data items for services, each structured sentence data item for service identifying a needed service corresponding to identified customer needs, said associated workflow process specification capable of assisting completion of each needed service (See Figure 12. See also column 7, lines 34-35, column 9, lines 55-70, and column 10, lines 1-10. Macrae et al. discloses a library containing hierarchical folders. For example, if the service of strep throat culture is needed by a customer, the Labs category would be opened, which contains different types of labs and their different services).

However, Macrae et al. does not expressly disclose including alerts that occur to signify that an action needs to be taken.

Brown discloses a method that includes alerts that occur to signify that an action needs to be taken, the method comprising the steps of:

obtaining dismissed alerts associated with existing service plans that include correspondence of certain ones of said structured sentences, said dismissed alerts being designated as one of an appropriate alert and an inappropriate alert (See figures 2, 4, 5, and 10, and column 13, lines 1-11, 24-28, and 4-49, which discuss obtaining information about dismissed alerts to take medication as prescribed);

grouping related inappropriate alerts (See figures 2, 4, 5, and 10, and column 13, lines 1-11, 24-28, and 4-49, and column 15, lines 10-15, and column 16, lines 28-39 and 40-50, which discusses grouping and analyzing the inappropriately dismissed alerts); and

determining a revised workflow and revised structured sentences based upon the grouping of inappropriate alerts (See figures 2, 4, 5, and 10, and column 13, lines 1-11, 24-28, and 4-49, and column 15, lines 10-15, and column 16, lines 28-39 and 40-65, wherein the workflow and the plan is edited based on the missed alerts and doses).

Both Macrae et al. and Brown disclose computer implemented patient care tools wherein data entered about the patient causes the workflow/medical plan to enact the appropriate workflow/medical plan instances. Furthermore, Macrae et al. discloses using its tool to medicate a patient during a treatment plan (See column 14, lines 51-67, and column 15, lines 1-5 and 19-22). It would have been obvious to a person of ordinary skill in the art at the time of the invention to equip the electronic workflow of Macrae et al. with an alert system in order to

increase the effectiveness of the medical tool by reminding the patient of the appropriate actions that need to be taken to comply with the medical plan and, based on the compliance or noncompliance of the patient, tailoring the procedure to better meet the needs of the patient.

48. As per claims 49-50 and 57-60, claims 49-50 and 57-60 are apparatus versions of claims 9-10 and 17-20, respectively. Since the specification provides nothing more than a software device running in a network computing environment utilizing standard computers, claims 49-50 and 57-60 are rejected on the same grounds and motivations as the methods of claims 9-10 and 17-20, respectively.

49. As per claim 14, Macrae et al. further discloses a method wherein the step of executing a workflow process instance includes the step of creating query data items that create or modify workflow relevant data that maps the response options in a question or structured sentence item to the decision step, thereby creating a single data value used in a decision step, task firing condition or routing rule as part of the execution of said workflow process instance as well as metadata that defines how the workflow instances map to the test results (See figures 2 and 6, and column 2, lines 38-43, column 7, lines 43-50, and column 8, lines 5-22, which disclose inputting the answer to the query "strep?" based on the lab results. The results are considered workflow relevant data for workflow process instances. See Figure 2 which discloses the workflow dealing with step throat. The workflow data directs the continuation of the workflow based on a decision step/routing rule. See column 13, lines 26-30, which discloses routing rules). However, Macrae et al. does not expressly disclose that this relevant workflow data maps to all places in the workflow to which it applies.

Macrae et al. teaches the generation of workflow relevant data based on occurrences like test results or the taking of vital statistics. It would have been obvious to one of ordinary skill in the art at the time of the invention to map the relevant workflow data to all places in the workflow that it applies in order to increase the consistency of the data as well as the efficiency of process by obtaining one accurate set of data and then applying it throughout the workflow.

50. As per claim 16, Macrae et al. further discloses a method wherein an interdisciplinary team of clinicians create the generic healthcare plans applicable to the patients and the step of creating the plurality of structured sentences that represents steps of a generic healthcare plan template (See column 1, lines 13-20, which discusses the generic healthcare plans being created by physicians, clinicians, committee members, and an interdisciplinary team. See column 7, lines 17-20, 29-37, and 53-65, which discusses the building of structured sentence models that represent steps of generic healthcare plan templates). However, Macae et al. does not expressly disclose the interdisciplinary team of clinicians creating the plurality of structured sentences.

It is old and well known that interdisciplinary teams of clinicians, physicians, and committee members create the acceptable medical procedures that are used by the medical community. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the interdisciplinary team of clinicians, physicians, and committee members of Macrae et al. build the structured sentences in order to create the most accurate and effective structured sentence protocols for the tool so that patients treated using said tool get the best medical attention.

51. As per claim 69, Macrae et al. further discloses a method wherein an interdisciplinary team of clinicians create the generic healthcare plans applicable to the patients or the step of

creating the plurality of structured sentences that represents steps of a generic healthcare plan template (See column 1, lines 13-20, which discusses the generic healthcare plans being created by physicians, clinicians, committee members, and an interdisciplinary team. See column 7, lines 17-20, 29-37, and 53-65, which discusses the building of structured sentence models that represent steps of generic healthcare plan templates). However, Macae et al. does not expressly disclose the interdisciplinary team of clinicians creating the plurality of structured sentences or that this team reviews drafts of the structured sentences after they are created.

It is old and well known that interdisciplinary teams of clinicians, physicians, and committee members create the acceptable medical procedures that are used by the medical community. It is also old and well known that hospitals in America have overseeing boards that manage the doctors of the medical facility. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the interdisciplinary team of clinicians, physicians, and committee members of Macrae et al. build and review the structured sentences in order to create the most accurate and effective structured sentence protocols for the tool so that patients treated using said tool get the best medical attention.

52. As per claims 54, 56, and 70, claims 54, 56, and 70 are apparatus versions of claims 14, 16, and 69. Since the specification provides nothing more than a software device running in a network computing environment utilizing standard computers, claims 54, 56, and 70 are rejected on the same grounds and motivations as the method of claims 14, 16, and 69.

Response to Arguments

53. Applicant's arguments with respect to claims 6, 8-10, 13-14, 16, 18-20, 24, 46, 40, 48-50, 53-54, 56, 58-60, 64 have been considered but are moot in view of the new ground(s) of rejection.

54. Applicant's arguments with regards to the § 102 rejections based on Macrae et al. (U.S. 5,826,237) and the § 102 rejections based on Macrae et al. in view of Brown (U.S. 5,960,403) have been fully considered but they are not persuasive. In the remarks, the Applicant argues that (1) Macrae et al. does not teach or suggest that the structured sentences and the work flow instances are distinct from each other, (2) the user of Macrae et al. must be familiar with workflow process diagrams and related icons, unlike the user of the present prospective invention, (3) Macrae et al. does not teach or suggest that a "template" is associated with a group of said structured sentences, (4) that while a particular template of Macrae et al. can be updated and reused when updating a treatment plan for various patients, there is no suggestion that this is performed on populations of patients, (5) Macrae et al. does not teach or suggest structured sentences for a goal, fact, protocol, or finding, and (6) the combination of the Macrae et al. reference and the Brown reference would not have been attempted by one of ordinary skill in the art.

In response to the Applicant's argument that (1) Macrae et al. does not teach or suggest that the structured sentences and the work flow instances are distinct from each other, the Examiner respectfully disagrees and further asserts that Macrae et al. discloses this distinctness when stating that the structured sentences are stored in a library and that a workflow template is formed using this library of structured sentences, as stated in column 7, lines 25-37. If the

workflow instances and the structured sentences stored in the library were not distinct, the building of this workflow would permanently remove the structured sentence from the library. Examiner points out that the structured sentence is merely a model, and that a representation, or copy, of this model is placed in a created workflow template. A copy of this workflow template is then assigned to a patient, and the manipulation and the modification of the template to the needs of the patient cause a patient treatment plan with associated workflow instances to be created, as stated in column 7, lines 55-67, and column 8, lines 1-3. Therefore, the modified and implemented workflow instance is distinct from the structured sentence model stored in the library.

In response to the Applicant's argument that (2) the user of Macrae et al. must be familiar with workflow process diagrams and related icons unlike the user of the present prospective invention, the Examiner respectfully points out that the claims nowhere assert that the user of the present prospective invention is not able to use or manipulate a workflow process diagram and the related icons.

In response to the Applicant's argument that (3) Macrae et al. does not teach or suggest that a "template" is associated with a group of said structured sentences, the Examiner respectfully disagrees and further asserts that Macrae et al. does disclose a template as an associated group of structured sentences when it discusses creating a workflow template using the library of service nodes and then storing this created workflow template in a template library, as discusses in column 7, lines 56-67, and column 8, lines 1-3. The examiner respectfully points out that the term "template" is not used in claim 26, as argued on page 7 of the received communications.

In response to the Applicant's argument that (4) that while a particular template of Macrae et al. can be updated and reused when updating a treatment plan for various patients, there is no suggestion that this is performed on populations of patients, the Examiner respectfully disagrees and further asserts that Macrae et al. discloses that a once a template has been modified, it is available for assignment to one or more patients to whom the template applies, as stated in column 7, lines 63-67, column 8, lines 1-3, and column 17, lines 23-26.

In response to the Applicant's argument that (5) Macrae et al. does not teach or suggest structured sentences for a goal, fact, protocol, or finding, the Examiner respectfully disagrees and asserts that Macrae et al. discloses this limitation when it discusses that the outcome of the protocol of a structured sentence would be a finding. Such is the example of the structured sentence representing a procedure for a strep test and the finding of this procedure being the outcome of a virus or of strep throat, as shown in the structured sentence of the template in column 8, lines 5-19 and 23-29.

In response to the Applicant's argument that (6) the combination of the Macrae et al. reference and the Brown refrence would not have been attempted by one of ordinary skill in the art, the Examiner respectfully disagrees and asserts that both Macrae et al. and Brown disclose computer implemented patient care tools wherein data entered about the patient causes the workflow/medical plan to enact the appropriate workflow/medical plan instances. Furthermore, Macrae et al. discloses using its tool to medicate a patient during a treatment plan, as stated in column 14, lines 51-67, and column 15, lines 1-5 and 19-22. Therefore, the combination of methodologies would seem reasonable to one of ordinary skill in the art at the time of the invention.

Conclusion

55. No claims allowed.

56. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ross et al. (U.S. 5,823,948) teaches a protocol for tracking and organizing medical records using a template.

Schroeder et al. (U.S. 6,037,940) teaches a user interface for interacting with a medical protocol system that creates a workflow medical plan.

Gilbert (U.S. 6,381,576) discloses an analysis and treatment system that uses predefined procedures to organize health care operations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

bvd
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